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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,044	03/14/2002	Masahiko Hatori	JP920010016	2206

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EXAMINER

RIOS CUEVAS, ROBERTO JOSE

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/063,044	Applicant(s) HATORI ET AL.	
	Examiner Roberto J Rios	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation: "in any time zone after the set predetermined time zone passes". There is insufficient antecedent basis for this limitation in the claim. Moreover, it is not clear how the battery charging is related to a time zone constraint.

3. The following art rejection will be made as best understood by the Examiner in light of the above 35 USC 112 rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 9-13, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Satou et al (JP 06-137650).

As per claim 1, Satou et al (herein after Satou) teach a power supply system comprising: a secondary battery (31) for supplying power to a load circuit, a power receiving unit for receiving power externally provided to the load circuit (Figure 1); a switch (33) for selectively supplying the power of the secondary battery or the power externally provided to the load circuit; and a controller for instructing the switch to stop the supply of the power externally provided to the load circuit for a predetermined time zone (abstract; constitution).

As per claim 2, Satou teaches the controller instructing the switch to stop the supply of the power externally provided to the load circuit in the predetermined time zone even when the source of the power externally provided is electrically connected with the power receiving unit (abstract; constitution).

As per claim 3, Satou teaches the controller instructing the switch to supply the power of the secondary battery to the load circuit in the predetermined time zone (abstract; constitution).

As per claim 4, Satou teaches the controller instructing the switch to supply the power externally provided to the load circuit after the predetermined time zone passes (translation [0015]).

As per claim 5, Satou teaches a battery charger (29), wherein the controller instructs the battery charger to charge the secondary battery by using the power externally provided after the predetermined time zone passes (translation [0013]).

As per claim 6, Satou teaches a power supply method for selectively supplying the power of a commercial power source (21) or a battery (31) to a load circuit, comprising the steps of: supplying the power of the battery to the load circuit in a predetermined time zone decided in accordance with the power consumption (peak time range) of the commercial power source; and supplying the power of the commercial power source to the load circuit in a time zone except the predetermined time zone (abstract; constitution).

As per claim 7, Satou teaches the predetermined time zone being decided in accordance with a time zone in which the power consumption of the commercial power source shows a peak (abstract; constitution).

As per claim 9, Satou teaches an electrical apparatus comprising: a device to be operated by the power of the battery or the commercial power source; and a control unit for controlling whether to preferentially supply the power of the battery or the power of the commercial power source to the device in accordance with a temporal factor (abstract; constitution).

As per claim 10, Satou teaches a power receiving unit for receiving the power of an external commercial power source for the device (Figure 1), wherein the control unit instructs a time zone for supplying the power of the battery to the device preferentially to the power of the commercial power source when the commercial power source is connected to the power receiving unit (Figure 1).

As per claim 11, Satou teaches the battery being built in the electrical apparatus (Figures 1 and 3).

As per claim 12, Satou teaches an electrical apparatus comprising: a device to be operated by receiving power; a power receiving unit for receiving the power of an external commercial power source for the device; a first power supply line for supplying the power of the commercial power source received by the power receiving unit to the device; a built in battery (31) for supplying power to the device; a second power supply line for supplying the power of the built in battery to the device (Figure 1); and a switching mechanism (33) for turning off the first power supply line and turning on the second power supply line when the commercial power source is connected to the power receiving unit, the commercial power source is connected to the power receiving unit, and a predetermined condition is satisfied (Figure 1; abstract; constitution).

As per claim 13, Satou teaches the predetermined condition being set in accordance with a season and a time (translation [0002]-[0003]).

As per claim 17, Satou teaches a power supply method for an electrical apparatus provided with a device to be operated by the power of a built in battery (31) or a commercial power source (21), comprising the steps of: supplying the power of the built in battery to the device in a first time zone decided in accordance with the power consumption of the commercial power source; supplying the power of the commercial power source to the device in a second time zone except the first time zone; and charging the built in battery by the commercial power source in the second time zone (abstract; constitution).

As per claim 19, Satou teaches charging of the built in battery by the commercial power source in the second time zone being performed by equalized electric energy after the first time zone passes (translation [0011]).

As per claim 20, Satou teaches charging of the built in battery by the commercial power source in the second time zone being performed in a time zone in which the power consumption of the commercial power source is small in the second time zone (nighttime).

6. Claims 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US Patent 6,509,717).

As per claim 14, Lee teaches an electrical apparatus provided with a device to be operated by the power of a built in battery (30) or a commercial power source comprising: a switching mechanism for determining whether to supply the power of the built in battery or the power of the commercial power source to the device (col. 9, line 12); and a controller for instructing the switching mechanism to supply the power of the built in battery to the device when the remained capacity of the built in battery is equal to or more than a predetermined value and supply the power of the commercial power source to the device when the remained capacity of the built in battery is less than the predetermined value (col. 9, lines 12-61).

As per claim 16, Lee teaches the electrical apparatus being a portable computer system (col. 3, line 19).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satou in view of Applicant's Admitted Prior Art (AAPA).

As per claim 8, Satou teaches coupling the battery during a peak daytime range but does not specifically the peak daytime range being between 1:00 and 4:00 pm. However, AAPA (page 1) teaches that power consumption is maximized in the time zone from 1:00 to 4:00 pm, wherein consumption peak lies in a time zone from 1:00 to 4:00 pm in summer (from July to September).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement AAPA's peak time range into Satou's peak daytime range for the purpose of maximizing power consumption.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Dailey (US patent 6,455,954).

As per claim 15, Lee teaches charging the built in battery by the power of the utility power source but does not specifically disclose charging the battery in any time zone after a predetermined time zone passes. However, Dailey teaches an electrical apparatus comprising a battery charger to charge a battery by the power of the commercial power source, wherein a controller is instructed to charge the battery

charger to charge said battery in any time zone after a set predetermined time zone passes (col. 4, line 52; col. 5, line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lee's charging arrangement with Dailey's charging arrangement for the purpose maintaining said battery in a pre-charged state and only allowing discharged of said battery during peak times.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satou.

As per claim 18, Satou teaches charging the battery but does not specifically disclose using the maximum charging capacity. However, the Examiner takes official notice that it is well known in the battery charging art to reduce the charging time of a battery by using a maximum charging capacity.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Satou's battery charging method by using a maximum charging capacity for the purpose of reducing the charging time of said battery.

11. Art of general nature relating to power control has been cited for applicant's review.

Communication with PTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rios whose telephone number is (571) 272-2056. In the event that Examiner Rios cannot be reached, his supervisor, Brian Sircus may be contacted at (571) 272-2800, ext. 36. The fax number for Before-Final communications and After-Final communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberto J. Rios
Patent Examiner